

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONSTRUCTION PERMIT

Permit No. 067CP01

Project Tracking Number X-161

June 20, 2003

The Department of Environmental Conservation (department), under the authority of AS 46.14 and 18 AAC 50, issues a construction permit to the permittee, Union Oil Company of California, d.b.a. Unocal, for the Monopod Platform Crane Engines Project at the Monopod Platform.

This permit satisfies the obligation of the owner and operator to obtain a construction permit as set out in AS 46.14.130(a).

As required by AS 46.14.120(c), the permittee shall comply with the terms and conditions of this construction permit.

[18 AAC 50.320(b), 1/18/97]

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society of Testing and Materials
CEMS	Continuous Emission Monitoring System
C.F.R.	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
EPA	US Environmental Protection Agency
HAPS	Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
HHV	Higher heating value
ID	Source Identification Number
MACT	Maximum Achievable Control Technology
NAICS	North American Industry Classification System
NESHAPs.....	Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 CFR 61]
NSPS	Federal New Source Performance Standards [as defined in 40 CFR 60]
PS	Performance specification
PSD	Prevention of Significant Deterioration
RM	Reference Method
SIC	Standard Industrial Classification

Units

acf.....	actual cubic foot
Btu.....	British Thermal Unit (1 Btu = 1,055 Joules)
dscf.....	Dry standard cubic foot
gr.	grain (1 pound = 7000 grains)
GPH.....	gallons per hour
hp.....	horsepower (bhp is horsepower at shaft) (1kW = 1,341 hp)
kW.....	kilowatts
MM.....	million (1 MM Btu = 10 ⁶ Btu)
PPM.....	Parts per million
PPMV.....	Parts per million volume
TPH.....	Tons per hour
TPY	Tons per year
Wt%	weight percent

Pollutants

CO	Carbon Monoxide
H ₂ S	Hydrogen Sulfide
NO _x , NO ₂	Oxides of Nitrogen, Nitrogen Dioxide respectively
PM ₁₀	particulate matter with aerodynamic diameter less than 10 microns
SO ₂	Sulfur dioxide
VOC	volatile organic compound [as defined in 18 AAC 50.990(103)]

Section 1 Identification**Names and Addresses**

Permittee: Union Oil Company of California d.b.a. Unocal
P.O. Box 196247
Anchorage Alaska, 99519-6247

Facility: Monopod Platform

Location: 60° 53' 49" N, 151° 34' 45.5" W

Physical Address: Upper Cook Inlet - Alaska

Owner: Union Oil Company of California, (operator) and Forest Oil Corporation. Unocal and Forest Oil Corporation are Publicly held corporations.

Operator: Unocal
P.O. Box 196247
Anchorage, AK 99519-6247

Permittee's Responsible Official Dale Haines, Alaska Operations Manager
Unocal – P.O. Box 196247
Anchorage, AK 99519-6247

Designated Agent: CT Corporation System
801 West 10th Street, Suite 300
Juneau, Alaska 99801

Facility and Building Contact: Paul Bartolowits and Paul Delago, Foremen
Phone (907) 776-6670 Fax (907) 776-6671

Fee Contact: David Bailey
Union Oil Company of California
P.O. Box 196247

Anchorage, AK 99519-6247
(907) 263-7694
dbaily@unocal.com

SIC Code of the Facility: 1311 Crude Petroleum and Natural Gas Production;

NAICS Code: 211111

Section 2 *Emission Information and Classification*

Emissions of Regulated Air Contaminants, as provided in permittee's application:

Oxides of Nitrogen (NO_x), Sulfur Dioxide (SO₂), Carbon Monoxide (CO), Particulate Matter, and Volatile Organic Compounds (VOC).

Construction Permit Classifications:

Note: Facility Classifications are described under 18 AAC 50.300(b) through (g), modification classifications are described under 18 AAC 50.300(h), and owner requested limits are described under 18 AAC 50.305(a)(1) through (4).

The Monopod Platform Crane Engines Project requires a construction permit because:

- a. The facility is classified as a Prevention of Significant Deterioration (PSD) Major Facility under 18 AAC 50.300(c)(1), as the facility has a potential to emit more than 250 tons per year of NO_x and CO; and
- b. The owner has requested limits to avoid classification as a PSD significant modification under 18 AAC 50.300(h)(3), as provided by 18 AAC 50.305(a)(4).

[18 AAC 50.320(a)(2), 1/18/97]

Section 3 Construction Permit Source Inventory

- 1. Authorization.** The permittee is authorized to modify and operate the facility in accordance with the construction permit application as may be currently applicable. This permit imposes fuel sulfur and operational limits on the sources listed in Table 1 to protect ambient air quality and avoid PSD preconstruction review.

The sources listed below have specific monitoring, record keeping, or reporting conditions in this construction permit. The source description and rating are given for identification purposes only. The facility equipment inventory is listed in revised Permit No. 067TVP01, issued December 2, 2002.

Table 1: Construction Permit Source Inventory

ID	Tag No.	Source Name	Source Description	Fuel Type	Rating/size	Install Date
13	M-CR-1780	Caterpillar 3406B-DITA Engine	East Crane	Diesel	420 hp	1996
14	M-CR-1790	Detroit Diesel 671 Engine	West Crane	Diesel	230 hp	1997

Section 4 *Ambient Air Quality Standards and Maximum Allowable Ambient Concentrations*

General Description. This permit contains terms and conditions to ensure that allowable emissions from the Monopod Platform Crane Engines Project will not cause an ambient concentration that exceeds the concentrations established in Table 6 of 18 AAC 50.310(d)(2) at any location that does not or would not meet the ambient air quality standard or maximum allowable ambient concentration.

2. *Fuel Oil Sulfur Content: Sources No. 13 and 14.* Do not burn fuel oil with sulfur content greater than **0.3 percent** sulfur by weight.

- 2.1 Record the fuel sulfur, measured in accordance with an appropriate methodology incorporated by reference within fuel specification standard ASTM D 396-92 or D 975-94 for each fuel shipment. Alternatively, provide a copy of the fuel vendor's fuel oil sulfur analysis results based on appropriate ASTM methodology.
- 2.2 Report the fuel sulfur content of each delivery in the facility operating report required by Condition 51, "Operating Reports," of revised Permit No. 067TVP01.

3. *Fuel Consumption Cap: Sources No. 13 and 14*

- 3.1 Limit operations of Source No. 13, East Crane Engine, to 66,900 gallons fuel oil per 12-month rolling period.
- 3.2 Limit operations of Source No. 14, West Crane Engine, to 24,400 gallons fuel oil per 12-month rolling period.
- 3.3 Record fuel consumption by Sources No. 13 and 14 as follows.
 - a. When 12-month rolling total fuel consumption is less than 90% of total allowable fuel consumption, record fuel consumption no less than once each month for each unit.
 - b. When rolling total fuel consumption is greater than 90% of the allowable limit, record fuel consumption each week.
- 3.4 Include monthly 12-month rolling totals for each of sources No. 13 and 14 in the facility operating report required by Condition 51, "Operating Reports," of revised Permit No. 067TVP01.

Section 5 State Emission Standards

4. **Visible Emissions.** Visible emissions from the sources listed in Table 1: Construction Permit Source Inventory shall meet the requirements of Condition 5, “Visible Emissions,” of revised Permit No. 067TVP01.

- 4.1 Monitor, record and report according to revised Permit No. 067TVP01, Section 13, Visible Emissions and Particulate Matter Monitoring Plan

[18 AAC 50.055(a)(1), 8/15/02]
[18 AAC 50.320(a)(2)(A-E), 8/15/02]

5. **Particulate Matter.** Particulate matter emissions from the sources listed in Table 1: Construction Permit Source Inventory shall meet the requirements of Condition 6, “Particulate Matter,” of revised Permit No. 067TVP01.

- 5.1 Monitor, record and report according to revised Permit No. 067TVP01, Section 13, Visible Emissions and Particulate Matter Monitoring Plan

[18 AAC 50.055(b)(1), 8/15/02]
[18 AAC 50.320(a)(2), 8/15/02]
[18 AAC 50.320(a)(2)(A-E), 8/15/02]

6. **Sulfur Compound Emissions.** Sulfur compound emissions, expressed as SO₂, from the sources listed in Table 1: Construction Permit Source Inventory shall meet the requirements of Condition 7, “Sulfur Compound Emissions,” of revised Permit No. 067TVP01.

- 6.1 Compliance with this requirement is assured by using a grade of fuel gas with an H₂S content that is not to exceed 4,345 PPM or fuel oil with a sulfur content not to exceed 0.75% by weight.

- 6.2 Monitor, record, and report according to Condition 7, “*Sulfur Compound Emissions*,” of revised Permit No. 067TVP01.

[18 AAC 50.055(c), 8/15/02]
[18 AAC 50.320(a)(2), 8/15/02]
[18 AAC 50.320(a)(2)(A-E), 8/15/02]

Section 6 Permit Documentation

May 17, 2002	Received Construction Permit application for Monopod Crane Engines.
June 5, 2002	Email from Jim Baumgartner (ADEC) to Janet Bounds (Unocal) Unocal Monopod Construction Permit Application Completeness issues.
June 17, 2002	Letter from Dale A. Haines (Unocal) to Jim Baumgartner (ADEC) Response to June 5 email from Jim Baumgartner to Janet Bounds.
February 4, 2003	Letter from Dale Haines (Unocal) to Jim Baumgartner (ADEC). Certification that Sources No. 1 and 2 are physically constrained from operating simultaneously.
April 25, 2003	Letter from Janet Bounds (Unocal) to Jim Baumgartner (ADEC). Comments on preliminary construction permit 067CP01. Request to postpone effective date of construction permit to revision date of operating permit 067TVP01 Revision 1.
April 28, 2003	Letter from Daniel Bevington (Kenai Peninsula Borough) to Jim Baumgartner (ADEC) notifying the department that the Kenai Peninsula Borough offers no objection to the proposed construction permit 067CP01 and revised operating permit 067TVP01 Revision 1.